Nuclear Energy, Science & Technology

(dollars in thousands)

	FY 2001 Comparable Approp.	FY 2002 Comparable Approp.	FY 2003 Request to Congress	FY 2003 vs. FY 2002	
Nuclear Energy, Science and Technology					
Energy Supply					
University reactor fuel assistance and support..	11,974	17,500	17,500	——	——
Research and development					
Nuclear energy plant optimization.....	4,857	6,500	——	-6,500	-100%
Nuclear energy research initiative.....	33,903	32,000	25,000	-7,000	-22%
Nuclear energy technologies.....	7,483	12,000	46,500	+34,500	+288%
Advanced nuclear medicine initiative.....	2,500	2,500	——	-2,500	-100%
Total, Research and development.....	48,743	53,000	71,500	+18,500	+35%
Infrastructure					
Fast flux test facility (FFTF).....	38,439	36,439	36,100	-339	-1%
Radiological facility management.....	88,284	86,682	83,038	-3,644	-4%
Total, Infrastructure.....	126,723	123,121	119,138	-3,983	-3%
Spent fuel pyroprocessing and transmutation....	68,698	77,250	18,221	-59,029	-76%
Program direction.....	23,839	23,875	24,300	+425	+2%
Subtotal, Energy Supply.....	279,977	294,746	250,659	-44,087	-15%
Use of PY balances and other adjustments.....	-2,872	-818	——	+818	+100%
Total, Nuclear Energy, Science and Technology.....	**277,105**	**293,928**	**250,659**	**-43,269**	**-15%**

- **Nuclear Energy, Science and Technology requests an overall budget of $250M, 15% less than FY 2002**
  - Effectively address the key issues affecting the future use of nuclear energy by conducting long-term, investigator-initiated, peer-reviewed research and development.
  - Consolidates spent fuel research and development activities previously funded in the Nuclear Facilities Management and Advanced Accelerator Applications programs into a new program called the **Spent Fuel Pyroprocessing and Transmutation** program.
  - Consolidates facilities and infrastructure activities previously funded in the Advanced Radioisotope Power System, Medical Isotope, Argonne National Laboratory – West Operations, and Test Reactor Area (TRA) Landlord programs into the **Radiological Facilities Management** program.
  - Enable U.S. universities to continue to produce highly trained nuclear engineers and scientists to supply the Nation's energy, environmental, health care, and national security needs.
  - Develop and demonstrate an advanced, proliferation-resistant technology to reduce the quantity and toxicity of U.S. commercial spent nuclear fuel while simultaneously enabling the U.S. to vastly increase the efficient use of its nuclear fuel resources.
  - Protect our Nation's nuclear R&D infrastructure by managing the Department's vital resources and capabilities, efficiently and effectively.
  - Deliver isotope products and services for commercial, medical, and research applications.
- **Nuclear Power 2010 Initiative**
  - Successfully address the regulatory, technical, and institutional issues to enable one or more orders for new, commercial nuclear power plants in the United States by 2005 for deployment by 2010.
- **Generation IV Initiative**
  - Develop next-generation nuclear energy systems that represent significant improvements in all aspects of nuclear power technology.
- **Fast Flux Test Facility (FFTF)**
  - Includes funding to conduct surveillance and maintenance activities to maintain the FFTF in full compliance with applicable Federal and State health, safety and environmental assessments. In addition, the request supports activities that implement the Secretary's decision to permanently deactivate FFTF.